Practitioner's Docket No.

LM(F)5791

PATENT

Preliminary Classification:

Proposed Class:

Subclass:

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand corner of the letter of transmittal accompanying the application papers, for example "Proposed Class 2, subclass 129," M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application Assistant Commissioner for Patents P.O. Box 2327 Arlington, VA 22202

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Stanley W. Driggs, Elliott D. Reitz, II, Dennis A. Tillotson

WARNING: 37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to §1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors.

For (title): COMPOUND CLASSIFIER FOR PATTERN RECOGNITION APPLICATIONS

CERTIFICATION UNDER 37 C.F.R. 1.10*

(Express Mail label number is mandatory.) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date November 27, 2001, in an envelope as "Express Mail Post office to Addressee," mailing Label Number EK983560402US, addressed to the: Box Patent Application, Assistant Commissioner for Patents, P.O. Box 2327, Arlington, VA 22202.

LISA L. PRINGLE

(type or print name of person mailing paper)

Signature of person mailing paper

WARNING:

Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence

*WARNING:

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. 1.10(b).

Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56, 442.

(Application Transmittal [4-1]---page 1 of 11)



Type of Application This new application is for a(n) (check one applicable item below) Original (nonprovisional)

☐ Plant

Design

WARNING: Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. 371(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application.

WARNING: Do not use this transmittal for the filing of a provisional application.

NOTE: If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and A NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.

Divisional.
Continuation.
Continuation-in-part (C-I-P)

2. Benefit of Prior U.S. Application(s) (35 U.S.C. 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
 - (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following Item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. 120, 121 or 365(c). (35 U.S.C. 154(a)(2) does not take into account, for the determination of the patent term, any application on which pnority is claimed under 35 U.S.C. 119, 365(a) or 365(b).) For a c-l-papplication, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

(Application Transmittal [4-1]—page 2 of 11)

WARNING: When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).
The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.
3. Papers Enclosed
A. Required for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 (Design) Application
29 Pages of specification
06_ Pages of claims
05_ Sheets of drawing
WARNING: DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 CFR § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).
NOTE: "Identifying indicia, if provided, should include the application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application. This information should be placed on the back of each sheet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top of the page "37 C.F.R. 1.84(c)).
(complete the following, if applicable)
☐ The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. § 1.84(b).
⊠ formal
☐ informal
B. Other Papers Enclosed
Pages of declaration and power of attorney
Pages of abstract
Other
4. Additional papers enclosed
Amendment to claims
Cancel in this applications claimsbefore calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)
Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)
Preliminary Amendment
Information Disclosure Statement (37 C.F.R. 1.98)
Form PTO-1449 (PTO/SB/08A and 08B)
(Application Transmittal [4-1]—page 3 of 11)

[Declaration of Biological Deposit
[Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence.
ĺ		Authorization of Attorney(s) to Accept and Follow Instructions from Representative
[Special Comments
[Other
5. Dec	lara	ion or oath (including power of attorney)
NOTE:	the plant applied the state of	why executed declaration is not required in a continuation or divisional application provided that rior nonprovisional application contained a declaration as required, the application being filed is or fewer than all the inventors named in the prior application, there is no new matter in the pation being filed, and a copy of the executed declaration filed in the prior application (showing gnature or an indication thereon that it was signed) is submitted. The copy must be accompanied statement requesting deletion of the names of person(s) who are not inventors of the application filed. If the declaration in the prior application was filed under § 1.47, then a copy of that ration must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning in under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently sted declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)-(3).
NOTE:	is dii abbr cour	claration filed to complete an application must be executed, identify the specification to which it acted, identify each inventor by full name including family name and at least one given name, without viation together with any other given name or initial, and the residence, post office address and try or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 R. § 1.63(a)(1)-(4).
\boxtimes]	Enclosed
\boxtimes]	Executed by
		(check all applicable boxes)
		☑ Inventor(s).
		legal representative of inventor(s).
		37 CFR § 1.42 or 1.43.
		joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
		☐ This is the petition required by 37 CFR § 1.47 and the statement required by 37 CFR § 1.47 is also attached. See item 13 below for fee.
		Not Enclosed.
NOTE:	the may	e the filing is a completion in the U.S. of an International Application or where the completion of I.S. application contains subject matter in addition to the International Application, the application be treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.
		Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of <i>all</i> the above named inventor(s).
(7	The d	eclaration or oath, along with the surcharge required by 37 CFR § 1.16(e) can be filed subsequently).
		Showing that the filing is authorized. (not required unless called into question. 37 CFR § 1.41(d))
		(Application Transmittal [4-1]—page 4 of 11)

(Application Transmittal [4-1]—page 5 of 11)

6. Inventorship Statement

		-					
WARNIN		If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.					
The inve	The inventorship for all the claims in this application are:						
\boxtimes	The	same.					
		or					
	Not the	the same. An explanation, including the ownership of the various claims at time the last claimed invention was made,					
		is submitted.					
		will be submitted.					
7. Lang	uag	je					
A re	n Enç equire	olication including a signed oath or declaration may be filed in a language other than English. I glish translation of the non-English language application and the processing fee of \$130.00 d by 37 CFR § 1.17(k) is required to be filed with the application, or within such time as may by the Office. 37 CFR § 1.52(d).					
\boxtimes	Eng	lish					
	Non-English						
		The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).					
8. Assig	gnm	nent					
\boxtimes	An a	assignment of the invention to Lockheed Martin Corporation					
•		is attached. A separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" OR ☑ FORM PTO 1595 is also attached. will follow.					
NOTE: "I	LLI fon o						
al	nd one	essignment is submitted with a new application, send two separate letters-one for the application of the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).					
WARNING	∋ : A pe	newly executed "CERTIFICATE UNDER 37 CFR § 3.73(b)" must be filed when a continuation-in- art application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.					

9. Certified Co	ру
-----------------	----

Certi	fied copy(ies) of	applicatio	on(s)			
	Country		Appln. No.			Filed
	Country	<u> </u>	Appln. No.			Filed
*	Country		Appln. No.			Filed
From w	hich priority is o	laimed				
ĺ	☐ is (are) atta	ched.				
i	will follow.					
NOTE:	The foreign appli declaration. 37 Ci	ication form FR & 1.55(a)	ing the basis for the	claim for priority	must be refe	rred to in the oath o
	This item is for a U.S. application of § 120 is itself en	any foreign or Internatio titled to prio	priority for which the nal Application from w vity from a prior foreig TION TRANSMITTAL	vhich this applica In application th	ation claims be en complete it	enefit under 35 U.S.(
10. F	ee Calculation	(37 C.F.R	ł. § 1.16)			
A. [🛚 Regular a	pplication				
		·	CLAIMS	AS FILED	·	
Nui	mber filed		Number		Rate 3	Basic Fee 7 C.F.R. § 1.16(a)
Total				-		\$740.00
	(37 CFR :))	20	- 20 =	x	\$ 18.00	0
ndepen						
Jaims (} 1.16(b	(37 CFR	2	- 3=		# 04 00	•
	dependent clair		- 3-	X	\$ 84.00	0
if any ((37 CFR § 1.16(d))		+	\$280.00	
	Amendmer	nt canceli	ng extra claims	is enclosed		
			g multiple-deper			
	_		is not being pai			
NOTE:	If the fees for extr	a claims are ation of the	not paid on filing they time period set for re	must be paid or	the claims can	celled by amendment demark Office in an
		F	iling fee Calculation	on	\$	740.00
B . [Design ap				· -	
	(\$330.00—	37 CFR §	1.16(f))			
		F	iling fee Calculation	on	\$_	
C .	☐ Plant appli				_	
	(\$540.00—	37 CFR §	1.16(g))			
		F	iling fee Calculation	on	\$	

\$____(Application Transmittal [4-1]—page 6 of 11)

11. Sr	nall	En	tity Staten	nent(s)					
] .	App and	licant is a sr 1.27	mall entity	and is e	ntitled to	small e	ntity stat	us under 37 CFR 1.9
WARNING:		G:	"Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. The refiling of an application under § 1.53 as a continuation, division, or continuation-in-part (including a continued prosecution application under § 1.53(d)), or the filing of a reissue application requires a new determination as to continued entitlement to small entity status for the continuing or reissue application. A nonprovisional application claiming benefit under 35 U.S.C. § 119(e), 120, 121, or 365(c) of a prior application, or a reissue application may rely on a statement filed in the prior application or in the patent if the nonprovisional application or the reissue application includes a reference to the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent or includes a such a reference for purposes of this section." 37 C.F.R. § 1.28(a)(2).						
WAR	NIN	G:	"Small entity statement car rev. 2, July 19	nequivo (ca ll y make	stablished the require	when the ed self-cei	person of pertification."	r persons signing the M.P.E.P., § 509.03, 6 th ed.,
				(complet	te the foll	owing, if a	applicat	ole)	
] /	٩ppl	icant is a sr	nall entity	and sma	all entity s	status is	hereby	claimed.
] :	Stati	us as a sma	II entity w	as claim	ed in prio	r applic	ation	
	-	09_	/		, filed	on			_, from which benefit
	ı	s be	ing claimed	for this a	oplication	under:	<u></u>		
		35 (J.S.C.§	119(e), 120, 121, 365(c),					
		and	which statu	s as a sm	all entity	is still pro	per and	desired.	
			A copy of						
			Filing Fee (Calculation	n (50% o	f A, B or	C abov	ve)	
				\$_					
NOTE:	are	e Tile	cess of the full d within 2 mo able under§1.:	nths of the	date of tir	ed if small e nely payme	entity stat ent of a 1	us is estab full fee. Th	lished and a refund request e two-month period is not
12. Re	que	st fo	or Internatio	onal-Type	Search	(37 C.F.F	R. 1.104	·(d))	
						if applical		` ','	
] F	Pleas wher	se prepare a n national ex	n internat	tional-type	e search	report fo	or this ap e.	plication at the time
							(Appli	cation Tran	smittal [4-1]—page 7 of 11)

13. Fee	Paym	ent	Being Made at This Time		
	Not E	Enclo	sed		
		No fi	ling fee is to be paid at this time.		
		(This	and the surcharge required by 37 C.F.R. 1.16(etly.)	∍) can be	paid subse-
\boxtimes	Enclo	osed			
		\boxtimes	Filing Fee	\$	740.00
		\boxtimes	Recording assignment (\$40.00; 37 C.F.R. 1.21(h)) (see attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION".)	\$	40.00
			Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached (\$130.00; 37 C.F.R. 1.47 and 1.17(i))	\$	
			For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. 1.52(d) and 1.17(k))	\$	
			Processing and retention fee (\$130.00; 37 C.F.R. 1.53(d) and 1.21(l))	\$	
			Fee for international-type search report (\$40.00; 37 C.F.R. 1.21(e))	\$	
NOTE:	failing to CFR §§ either th	comp 1.53 ne bas	1(I) establishes a fee for processing and retaining any applete the application pursuant to 37 CFR § 1.53(f) and this and 1.78(a)(1), indicate that in order to obtain the benefic filing fee must be paid, or the processing and retention motification under § 53(f).	s, as well a efit of a pri	s the changes to 3: or U.S. application
14 Mei	hod of	F Day	Total Fees enclosed	\$	780.00
T. Mic		_	he amount of \$ 780.00		
				=	
	\$		Account No	_in the	amount of
	A du	olicat	e of this transmittal is attached.		
NOTE:	Fees sho 1.22(b).	ould b	e itemized in such a manner that it is clear for which purpo	se the fees	are paid. 37 CFR §
			(Application 7	Fr <i>a</i> nsmitt <i>a</i> l	[4-1]—page 8 of 11

15. Authorization to Charge Additional Fees

WARNING: If no fees are to be paid on filing, the following items should not be completed.

WARNING: Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.

The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. 20-0090 :

- 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
- 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)
- NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 CFR § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.
 - 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
 - 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a)).
 - 37 C.F.R. § 1.17 (application processing fees)
- NOTE: ". . . A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).
 - 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))
- **NOTE:** Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 CFR § 1.311(b).
- NOTE: 37 CFR § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . the issue fee. . ." From the wording of 37 CFR § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

(Application Transmittal [4-1]—page 9 of 11)

16. Instructions as to Overpayment

NOTE:	" Amounts of twenty-five dollars or less will not be returned unless specifically requested wa reasonable time, nor will the payer be notified of such amounts; amounts over twenty-five dollars be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).					
		Credit Account No				
	\boxtimes	Refund				

Reg. No. 20,127

Tel. No. (216) 621-2234

SIGNATURE OF PRACTITIONER

Robert B. Sundheim

(type or print name of attorney)

TAROLLI, SUNDHEIM, COVELL, TUMMINO & SZABO LLP 526 Superior Avenue, Suite 1111 Cleveland, OH 44114-1400

(Application Transmittal [4-1]—page 10 of 11)

	Incorporation by reference of added pages					
	pr st Al	heck the following item if the application in this transmittal claims the benefit of fior U.S. application(s) (including an international application entening the U.S. age as a continuation, divisional or C-I-P application) and complete and attach the DDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF RIOR U.S. APPLICATION(S) CLAIMED)				
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed				
		Number of pages added				
		Plus Added Pages for Papers Referred to in Item 4 Above				
		Number of pages added				
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.				
		Number of pages added				
		Plus "Assignment Cover Letter Accompanying New Application"				
		Number of pages added				
\boxtimes	State	ment Where No Further Pages Added				
		f no further pages form a part of this Transmittal, then end this Transmittal with this age and check the following item)				
	\boxtimes	This transmittal ends with this page.				

(Application Transmittal [4-1]—page 11 of 11)